

# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10/669,162A
Source:	- IFWO -
Date Processed by STIC:	5/7/04 ~

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221 Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1 EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">http://www.uspto.gov/ebc/efs/downloads/documents.htm</a>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry directly to (EFFECTIVE 12/01/03):
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

## Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/669, 162A
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5 Variable Length	Sequence(s) contain h's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7 Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



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### RAW SEQUENCE LISTING

DATE: 05/07/2004 TIME: 14:10:39

PATENT APPLICATION: US/10/669,162A

Input Set : A:\250060016U2.txt

Output Set: N:\CRF4\05072004\J669162A.raw

```
3 <110 > APPLICANT: Breaker, Ronald R.
        Nahvi, Ali
 5
        Sudarsan, Narasimhan
        Ebert, Margaret S.
 7
        Winkler, Wade
        Barrick, Jeffrey E.
 8
        Wickiser, John K.
11 <120> TITLE OF INVENTION: RIBOSWITCHES, METHODS FOR THEIR USE, AND
        COMPOSITIONS FOR USE WITH RIBOSWITCHES
14 <130> FILE REFERENCE: 25006.0016U2
                                                          pp 1-7
16 <140> CURRENT APPLICATION NUMBER: 10/669,162A
17 <141> CURRENT FILING DATE: 2003-09-22
19 <150> PRIOR APPLICATION NUMBER: 60/412,468
20 <151> PRIOR FILING DATE: 2002-09-20
22 <160> NUMBER OF SEQ ID NOS: 377
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
26 <210> SEO ID NO: 1
27 <211> LENGTH: 202
28 <212> TYPE: RNA
29 <213 > ORGANISM: Escherichia coli
31 <400> SEQUENCE: 1
32 gccgguccug ugaguuaaua gggaauccag ugcgaaucug gagcugacgc gcagcgguaa 60
33 ggaaaggugc gaugauugcg uuaugcggac acugccauuc ggugggaagu caucaucucu 120
34 uaguaucuua gauaccccuc caagcccgaa gaccugccgg ccaacgucgc aucugguucu 180
                                                                 202
35 caucaucgcg uaauauugau ga
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 165
39 <212> TYPE: RNA
40 <213 > ORGANISM: Escherichia coli
42 <220> FEATURE:
54 aucuggauaa ugccagegua gggaagucae ggaecaecag gucauugeuu cuucaeguua 120
                                                                 165
55 uggcaggage aaacuaugea aguegaeeug euggruýcag egeaa
57 <210> SEQ ID NO: 3
58 <211> LENGTH: 240
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## RAW SEQUENCE LISTING PATENT APPLICATION: US/10/669,162A DATE: 05/07/2004 TIME: 14:10:39

Input Set : A:\250060016U2.txt

Output Set: N:\CRF4\05072004\J669162A.raw

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59 <212> TYPE: RNA
  60 <213> ORGANISM: Escherichia coli
  62 <220> FEATURE:
  63 <221> NAME/KEY: misc feature
  64 <222> LOCATION: (155)...(240)
  65 <223> OTHER INFORMATION: n = g, a, c, or
  67 <400> SEQUENCE: 3
  68 ggaaugeece auuugegggg cuaauuucuu gueggaguge cuuaaeugge ugagaeeguu 60
  69 uauucgggau ccgcggaacc ugaucaggcu aauaccugcg aagggaacaa gaguuaaucu 120
-> 70 gcuaucgcau cgcccugcg gcgaucgucu cuugnnnnnn nnnnnnnnn nnnnnnnnn 180
  73 <210> SEQ ID NO: 4
  74 <211> LENGTH: 165
  75 <212> TYPE: (RNA)
  76 <213> ORGANISM: Escherichia coli
  78 <220> FEATURE:
  79 <221> NAME/KEY: misc feature
  80 <222> LOCATION: 65, 74, 107, 130
  81 <223> OTHER INFORMATION: s = g or c
  83 <220> FEATURE:
  84 <221> NAME/KEY: misc feature
  85 <222> LOCATION: 25, 26, 34, 35, 64, 75, 106, 131
  86 <223 > OTHER INFORMATION: w = a \text{ or } (t/u)
  88 <400> SEQUENCE: 4
  89 ggaaccaaac gacucggggu gcccwwcugc gugwwggcug agaaauaccc guaucaccug 60
  90 aucwsgauaa ugcswgcgua gggaagucac ggaccaccag gucauwscuu cuucacguua 120
  91 uggcaggags waacuaugca agucgaccug cuggauccag cgcaa
  93 <210> SEQ ID NO: 5
  94 <211> LENGTH: 176
  95 <212> TYPE: (RNA)
  96 <213> ORGANISM: Artificial Sequence
  98 <220> FEATURE:
  99 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
            synthetic construct
  100
  102 <220> FEATURE:
  103 <221> NAME/KEY: misc feature
  104 <222> LOCATION: (39)...(156)
  105 <223 > OTHER INFORMATION: n = g, a, c or (t/t)
  107 <400> SEQUENCE: 5
-> 108 ggauaauagc cguagguugc gaaagcgacc cugaguagnn nnnnncaaga gaagcagagg 60
  109 gacuggeceg acgaageuue ageaaceggu guaauggega ucageeauga ecaaggugeu 120
  110 aaauccagca agcucgaaca gcuuggaagn nnnnnncgaa acgguagcga gagcuc
  113 <210> SEQ ID NO: 6
  114 <211> LENGTH: 97
  115 <212> TYPE ( RNA
  116 <213 > ORGANISM: Artificial Sequence
  118 <220> FEATURE:
  119 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
            synthetic construct
```

## PATENT APPLICATION: US/10/669,162A TIME: 14:10:39 Input Set : A:\250060016U2.txt Output Set: N:\CRF4\05072004\J669162A.raw 134 <221> NAME/KEY: misc feature 135 <222> LOCATION: 27, 36, 48, 53, 57, 80, 87 136 <223 > OTHER INFORMATION: r = a or g138 <220> FEATURE: 139 <221> NAME/KEY: misc\_feature 141 <223> OTHER INFORMATION: y = c or (t/u)143 <400> SEQUENCE: 6 -> 144 nggunnnnaa nngggaannn ggunnnrann connnrongn necegenren gurnnnrnnn 60 145 cacugnyggg aaggnnnnnr agycngrana cengeen 147 <210> SEQ ID NO: 7 148 <211> LENGTH: 56 149 <212> TYPE: (RNA) 150 <213> ORGANISM: Artificial Sequence 152 <220> FEATURE: 153 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note = synthetic construct 156 <220> FEATURE: 157 <221> NAME/KEY: misc feature 158 <222> LOCATION: 7, 50 159 <223> OTHER INFORMATION: d = g, a or f(u)161 <220> FEATURE See item 5 on Eur furnment 164 <223> OTHER INFORMATION n = a variable number of any nucleotide 167 <221> NAME/KEY: misc feature 168 <222> LOCATION: 2-5, 17-20, 21-24, 30-34, 38-40, 41-43, 45-47 169 <223 > OTHER INFORMATION: n = g, a, c or (t/u)171 <220> FEATURE: 172 <221> NAME/KEY: misc\_feature 173 <222> LOCATION: 54 174 <223> OTHER INFORMATION: r = a or g177 <400> SEQUENCE: 7 -> 178 nnnnngdncu gaganannnn nnnnaccugn nnnncnunnn nnngnnncgd aggran 56

RAW SEQUENCE LISTING

DATE: 05/07/2004

183 <213 > ORGANISM: Artificial Sequence

180 <210> SEQ ID NO: 8 181 <211> LENGTH: 97 182 <212> TYPE: (RNA)

DATE: 05/07/2004

TIME: 14:10:39

## Input Set : A:\250060016U2.txt Output Set: N:\CRF4\05072004\J669162A.raw 185 <220> FEATURE: 186 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note = 187 synthetic construct 189 <220> FEATURE: 190 <221> NAME/KEY: misc feature 191 <222> LOCATION: 57, 62 192 <223 > OTHER INFORMATION: k = g or 194 <220> FEATURE: 195 <221> NAME/KEY: misc\_feature 196 <222> LOCATION: 37, 47 a variable number of any nucleotide 197 <223 > OTHER INFORMATION: n = 199 <220> FEATURE: 200 <221> NAME/KEY: misc feature 201 <222> LOCATION: 11, 17, 20, 28, 36, 46, 48, 58, 61, 77-79 202 <223 > OTHER INFORMATION: n = g, a, c or (t/u)204 <220> FEATURE: 205 <221> NAME/KEY: misc feature 206 <222> LOCATION: 6, 35, 43, 54, 59, 65-68, 74, 90, 91, 95-97 207 <223 > OTHER INFORMATION: r = a or g209 <220> FEATURE: 210 <221> NAME/KEY: misc feature 211 <222> LOCATION: 1-3, 15, 31, 40, 44, 51-53, 64, 84 212 <223 > OTHER INFORMATION: y = c or (E/u)214 <400> SEQUENCE: 8 -> 215 yyyucrgggc ngggygnaan ucccnaccgg yggurnnagy ccrygnnnga yyyrguknra 60 216 nkcyrrrrcc gacrgunnna gucyggaugr ragarrr 218 <210> SEQ ID NO: 9 219 <211> LENGTH: 86 220 <212> TYPE: (RNA) 221 <213 > ORGANISM: Artificial Sequence 223 <220> FEATURE: 224 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note = synthetic construct 225 227 <220> FEATURE: 228 <221> NAME/KEY: misc feature 229 <222> LOCATION: 52, 72 230 <223> OTHER INFORMATION: n = a variable number of any nucleotide 232 <220> FEATURE: 233 <221> NAME/KEY: misc feature 234 <222> LOCATION: 1, 7-9, 11, 14, 16, 18, 25, 26, 32, 33, 37, 39, 42, 43, 50, 51, 53-55, 62, 63, 66-69, 71, 73, 7<u>5,</u> 76, 78, 79, 86 236 <223 > OTHER INFORMATION: n = g, a, c or (t/u)238 <220> FEATURE: 239 <221> NAME/KEY: misc\_feature / 240 <222> LOCATION: 3/8, 4/4, 70, 77, 8/3 241 <223> OTHER INFORMATION: r = a or g243 <220> FEATURE: 244 <221> NAME/KEY: misc\_feature 245 <222> LOCATION: 17, 34, 60, 74

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/669,162A

DATE: 05/07/2004

```
PATENT APPLICATION: US/10/669,162A
                                                              TIME: 14:10:39
                   Input Set : A:\250060016U2.txt
                   Output Set: N:\CRF4\05072004\J669162A.raw
  246 <223 > OTHER INFORMATION: y = c \text{ or } (-/u)
  248 <400> SEQUENCE: 9
-> 249 neuuaunnng agnngnynga gggannggee ennyganrne ennrgeaaen nnnnngugey 60
  250 annconnnr nnnynnrng auragn
  252 <210> SEQ ID NO: 10
  253 <211> LENGTH: 69
  254 <212> TYPE: (RNA)
  255 <213> ORGANISM: Artificial Sequence
  257 <220> FEATURE:
  258 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
  259
             synthetic construct
  261 <220> FEATURE:
  262 <221> NAME/KEY: misc feature
  263 <222> LOCATION: 1, 2, 10-17, 22, 25-31, 34, 40-46, 54-60, 68, 69
  264 <223> OTHER INFORMATION: n = g, a, c or (t/u)
  266 <220> FEATURE:
  267 <221> NAME/KEY: misc feature
  268 <222> LOCATION: 5, 18, 67
  269 <223> OTHER INFORMATION: r = a \text{ or } q
   271 <220> FEATURE:
   272 <221> NAME/KEY: misc feature
   273 <222> LOCATION: 65
   274 <223 > OTHER INFORMATION: y = c or(t/u)
   276 <400> SEQUENCE: 10
-> 277 nnucruauan nnnnnnrau anggnnnnnn ngunucuacn nnnnnnccgu aaannnnnnn 60
   278 acuaygrnn
   280 <210> SEQ ID NO: 11
   281 <211> LENGTH: 69
   282 <212> TYPE: RNA
   283 <213> ORGANISM: Artificial Sequence
   285 <220> FEATURE:
   286 <223> OTHER INFORMATION: Description of Artificial Sequence:/Note =
             synthetic construct
   287
   289 <220> FEATURE:
   290 <221> NAME/KEY: misc_feature
                                                    40-46, 54-60, 68, 69
   291 <222> LOCATION: 1, 2, 10-17, 22, 25-31, 34,
   292 <223> OTHER INFORMATION: n = g, a, c or
   294 <220> FEATURE:
   295 <221> NAME/KEY: misc feature
   296 <222> LOCATION: 5, 18, 61
   297 <223> OTHER INFORMATION: r = a or g
   299 <220> FEATURE:
   300 <221> NAME/KEY: misc feature
   301 <222> LOCATION: 65
   302 <223> OTHER INFORMATION: y = c or(t/u)
   304 <400> SEQUENCE: 11
-> 305 nnucruauan nnnnnnrau anggnnnnnn ngunucuacn nnnnnnccgu aaannnnnnn 60
                                                                            69
   306 auuaygknn
   308 <210> SEQ ID NO: 12
                                              The types of errors shown exist throughout
                                               the Sequence Listing. Please check subsequent
                                               sequences for similar errors.
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/669,162A

TIME: 14:10:40

Input Set : A:\250060016U2.txt

Output Set: N:\CRF4\05072004\J669162A.raw

#### ease Note:

e of n and/or Xaa have been detected in the Sequence Listing. Please review the quence Listing to ensure that a corresponding explanation is presented in the <220> <223> fields of each sequence which presents at least one n or Xaa.

```
x#:3; N Pos. 155,156,157,158,159,160,161,162,163,164,165,166,167,168,169
#:3; N Pos. 170,171,172,173,174,175,176,177,178,179,180,181,182,183,184
1#:3; N Pos. 185,186,187,188,189,190,191,192,193,194,195,196,197,198,199
\chi#:3; N Pos. 200,201,202,203,204,205,206,207,208,209,210,211,212,213,214
#:3; N Pos. 215,216,217,218,219,220,221,222,223,224,225,226,227,228,229
1#:3; N Pos. 230,231,232,233,234,235,236,237,238,239,240
7#:5; N Pos. 3/9,40,41,42,43,44,45,150,151,152,153,154,155,156
1#:6; N Pos. 1, 5, 6, 7, 8, 11, 12, 18, 19, 20, 24, 25, 26, 29, 30, 33, 34, 35, 38, 40, 41, 47
1#:6; N Pos. 50,54,55,56,58,59,60,66,75,7$,77,78,79,85,89,9$3,9$7
1#:7; N Pos. 1,2,3,4,5,8,15,17,18,19,20,21,22,23,24,30,31,32,33,34,36,38
#:7; N Pos. 39,40,41,42,43,45,46,47,56
1#:8; N Pos. 11,17,20,25,36,37,46,47,48,58,61,77,78,79
1#:9; N Pos. 1,7,8,9,18,14,16,18,25,26,32,33,31,39,42,48,50,81,52,53,54
]#:9; N Pos. 55,92,63,66,67,68,69,71,72,7$,7$,76,78,79,86
1#:10; N Pos. -1,2,10,11,12,13,14,15,16,17,22,25,26,27,28,29,30,31,34,40
1#:10; N Pos. 41,42,43,44,45,46,54,55,56,57,58,59,60,68,68
1#:11; N Pos. 1,2,10,11,12,13,14,15,16,17,22,25,26,27,28,29,30,31,34,40
#:11; N Pos. 41,42,43,44,45,46,54,55,56,57,58,59,60,68,69
#:12; N Pos. 1,13,14,15,16,17,18,20,21,26,27,28,29,30,31,32,33,34,35,39
1#:12; N Pos. 40,41,42,43,44,45,46,47,48,49,50,51,52,53,59,60,61,62,63,64
#:12; N Pos. 65,66,67,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93
x#:12; N Pos. 94,95,96,97,98,99,100,101,107,108,109,110,111,112,113,114
1#:12; N Pos. 115,116,117,118,121,122,123,124,125,126,127,128,129,130,131
#:12; N Pos. 132,139,145,151
1#:15; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52
7#:15; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72
#:15; N Pos. 73,74,75,76,77,78,79,80,81,82,83
1#:16; N Pos. 33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52
#:16; N Pos. 53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72
1#:16; N Pos. 73,74,75,76,77,78,79,80,81,82,83
#:17; N Pos. 15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34
1#:17; N Pos. 35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54
ן#:17; N Pos. 55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74
1#:17; N Pos. 75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94
#:17; N Pos. 95,96,97,98,99,100,101,102,103,104,105,106,107,108,109,110
T#:17; N Pos. 111,112,113,114,115,116,117,118,119,120,121,122,123
\pi#:18; N Pos. 1,2,3,4,5,6,7,10,11,12,13,14,15,16,23,25,26,27,28,29,30,31
I#:18; N Pos. 32,40,41,42,44,46,47,48,49,50,51,53,54,55,64,65,66
#:19; N Pos. 12,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,42,43,44
#:19; N Pos. 45,46,47,48,49,50,51
g#:20; N Pos. 12,20,21,22,23,24,25,26,27,28,29
ɪ#:21; N Pos. 12,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38
_{1}#:21; N Pos. 39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58
#:21; N Pos. 59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78
```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/669,162A

DATE: 05/07/2004 TIME: 14:10:40

Input Set : A:\250060016U2.txt

Output Set: N:\CRF4\05072004\J669162A.raw

I#:21; N Pos. 79,89,94
I#:22; N Pos. 19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38
I#:22; N Pos. 39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58
I#:22; N Pos. 59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78
I#:22; N Pos. 79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98
I#:22; N Pos. 99,100,101,102,103,104,105,106,107,108,109,110,111,112,113
I#:22; N Pos. 114,115,116,117,118,119,120,121,122,123,124,125,126,127,128

#### VERIFICATION SUMMARY

DATE: 05/07/2004 PATENT APPLICATION: US/10/669,162A TIME: 14:10:40

Input Set : A:\250060016U2.txt

Output Set: N:\CRF4\05072004\J669162A.raw

```
70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:120
341 Repeated in SeqNo=3
108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
341 Repeated in SeqNo=5
144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
341 Repeated in SeqNo=6
178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
341 Repeated in SeqNo=8
249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
341 Repeated in SeqNo=9
277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
341 Repeated in SeqNo=10
305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
341 Repeated in SeqNo=11
349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
341 Repeated in SeqNo=12
384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
341 Repeated in SeqNo=15
399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
341 Repeated in SeqNo=16
114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
341 Repeated in SeqNo=17
144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
341 Repeated in SeqNo=18
158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
341 Repeated in SeqNo=21
501 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
341 Repeated in SeqNo=22
517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
341 Repeated in SeqNo=23
533 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
341 Repeated in SeqNo=24
548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
341 Repeated in SeqNo=25
563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
341 Repeated in SeqNo=26
578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
341 Repeated in SeqNo=27
594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
341 Repeated in SeqNo=28
509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
341 Repeated in SeqNo=29
525 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
341 Repeated in SeqNo=30
541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
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VERIFICATION SUMMARY

DATE: 05/07/2004

PATENT APPLICATION: US/10/669,162A

TIME: 14:10:40

Input Set : A:\250060016U2.txt

Output Set: N:\CRF4\05072004\J669162A.raw

341 Repeated in SeqNo=31

557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0

1713 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:98